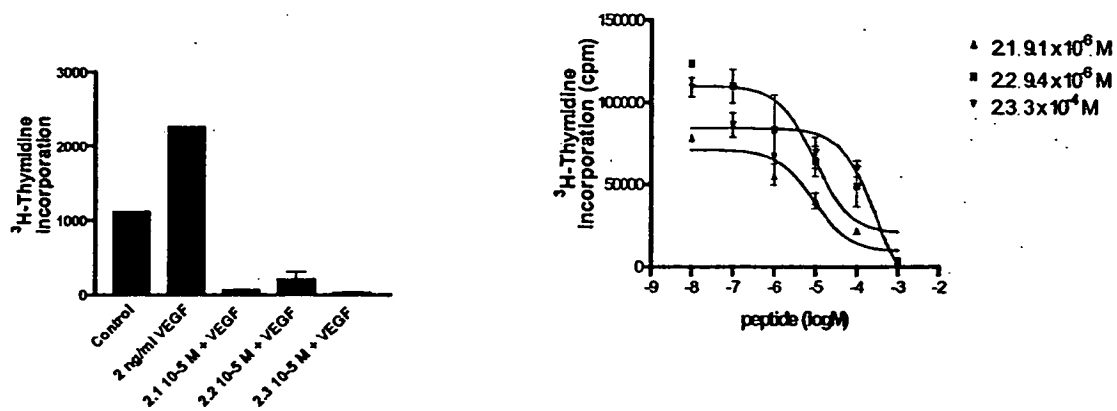
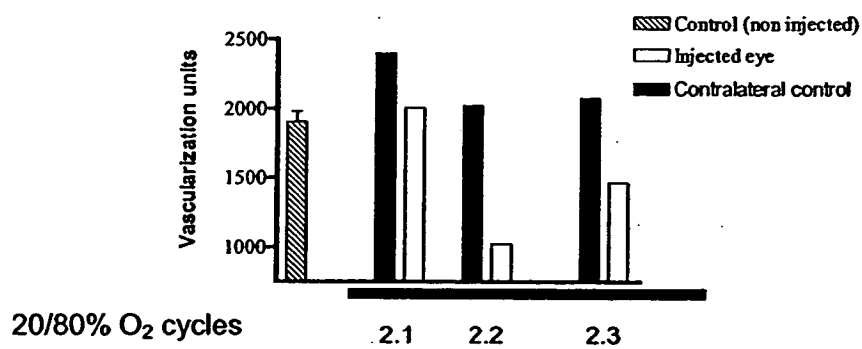


FIG. 1



A

B



C

FIG. 2

NLTIRVRKEDEGLYTCQACSVLGCAKVEAFFIIEGAQEKTNLEIILVGTAVIAMFFWL 780

LLVIILRTVVRANGGELKTGYLSIVMDPDELPLDEHCERLPYDASKWEFPRDRILKLGKPL 840

GRGAFGQVIEADAFGIDKTATCRTVAVKMLKEGATHSEHRALMSELKILIHIGHLNVVN 900

LLGACTKPGGPLMVIVEFCKFGNLSTYLRSKRNEFVPYKTKGARFRQGDYVGAIPVDLK 960

RRLDSITSSQSSASSGFVEEKSLSDVVEERAPEDLYKDFLTLEHLICYSFQVAKGMEFLA 1020

SRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMAPETIFDR 1080

VYTIQSDVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTPEMYQTML 1140

DCWHGEPQRPTFSELVEHLGNLLQANAQQDGKDYIVLPISETLSMEEDSGLSLPTSPVS 1200

CMEKEEVCDPKFHYDNTAGISQYLQNSKRKSRPVSVKTFEDIPLBEPVKVIPDDNQDTS 1260

GMVLASEELKTLEDRTKLSPSPGGMVPSKSRRESVASEGSNQTSQYQSGYHSDDTDTTVYS 1320

SEBAELLKLEIGVQTGSTAQILQPDSGTTLSSPPV

FIG. 3 continued

MKVLLRLICFIALLISSLEADKCKEREKKIILVSSANBIDVRPCPLNPNEHKGTITWYKD 60
 ↑
 Ig-like domain 1 →
 DSKTPVSTEQASRIHQHKKLWFVPKRVDSGHYYCVVRNSSYCLRIKISAKFVNEPNL 120
 CYNQAIFKQKLPVAGDGLVCPYMEFFKNENNELPKLQWYKDCPLLLDNIHFSGVKDR 180
 ↑
 Ig-like 2 →
LIVMNVAEKHRGNYTCHASTYTLGKQYPITRVIEFITLEENKPTRPVIIVSPANETMEVDL 240
 ↑
 Ig-like 3 →
 GSQIQLICNVTGQLSDIAYWKWNGSVIDEDDPVLGEDIYSVENPANKRRSTLITVLNISE 300
 IESRFYKHPFTCFKNTHGIDAAIYQLIYPVTNFQKHMIGICVTLTVIIVCSVFIYKIFK 360
 IDIVLWYRDSYDFLPKASDGKTYDAYILYPKTVGEGSTSDCDIFVFKVLPEVLEKQCG 420
 YKLFYIGRDDYVGEDIVEVINENVKRSRLIIILVRETSGFSWLGGSSEEQIAMYNALVQ 480
 DGIKVVLLLELEKIQDYKMPESIKFIKQKHGAIRWSGDFTQGPQSAKTRFWKNVRYHMPV 540
 QRRSPSSKHQLLSPATKEKLQREAHVPLG 569

FIG. 4

MKSGSGGGSPTSLWGLLFLSAALSLWPTSGEICGPGIDIRNDYQQLKRLNCTVIEGYLH 60
 Chaîne α →
 ILLISKAEDYRSYRFPKLTVITEYLLLFRVAGLESLGDLFPNLTVIRGWKLFYNYALVIF 120
 EMTNLKDIGLYNLRNITRGAIRIEKNADLCYLSTVDWSLILDAVSNNYIVGNKPPKECGD 180
 LCPGTMEEKPMCEKTTINNEYNYRCWTTNRCQKMCPSCTGKRACTENNECCHPECLGSCS 240
 ↑ Cyst rich domain →
 APDNDTACVACRHYHYAGVCVPACPPNTYRFEGWRCVDRDFCANILSAESSDSEGFVIHD 300
 GECMQECPSGFIIRNGSQSMYCIPCEGPCPKVCEEEKTKTKTIDSVTSAQMLQGCTIFKGNL 360
 ← Cyst rich domain ↑ ↑ L2 domain →
 LINIRRGNNIASLENFMGLEIVVTGYVKIRHSHALVSLSFLKNLRLILGEEQLEGNYSF 420
 YVLDNQNLQQLWDWDHRNLTIKAGKMYFAPNPKLCVSEIYRMEEVTGKGRQSKGDINTR 480
 NNGERASCESDVLHFTSTTTSKNRIIITWHRYRPPDYRDLISFTVYYKEAPFKNVTEYDG 540
 ← L2 ↑ ↑ FbnIII-1 →
 QDACGSNSWNMVDVLDLPPNKDVEPGILLEGKLPWTQYAVYVKAVTLTMVENDHIRGAKSE 600
 ILYIRTNASVPSIPLDVLASANSSSQLIVKWNPPSLPNGNLSYYIVRWQRQPDGYLYRH 660
 ← FbnIII-1 ↑ ↑ FbnIII-2a →
 NYCSKDKIPIRKYADGTIDIEEVTENPKTEVCGGEGKGPCCACPKTEAEKQAEKERAAYRK 720
 VFENFLHNSIFVPRPERKRRDVMQVANTTMSSRSRNTTAADTYNITDPEELETEYPPFES 780
 ← Juxtamembranaire α Chaîne α / Chaîne β →
 RVDNKERTVISNLRPFTLYRIDIHSCNHEAKLGCASNFVFARTMPAEGADDIPGPVTW 840
 ↑ FbnIII-2bdomain → ← FbnIII-2b ↑ ↑ FbnIII-3 →
 EPRPENSIFLKWPEPENPNGLILMYBIKYGSQVEDQRECVSRQBYRKYGGAKLNRLNPGN 900
 YTARIQATSLSGNGSWTDPVFFYVQAKTGYENFIHLIIALPVAVLLIVGGLVIMLYVFHR 960
 Juxtamembranous β
 KRNSRLGNGVLYASVNPEYFSAADVVPDEWEVAREKITMSRELQGSGFGMVYEGVAKG 1020
 VVKDEPETRVAIKTVNEAASMRERIEFLNEASVMKEFNCHHVRLLGVVVSQGQPTLVIME 1080

LMTRGDLKSYLRSLRPEMENNVLAPP SLSKMIQMAGEIADGMAYLNANKFVERDLAARN 1140

CMVAEDFTVKIGDFGMTRDIYETDYRKGGKGLLPVRWMSPELKDGVFTTYSVWSFGV 1200

VLWEIATLAEQPYQGLSNEQVLR FVMEGGLLDKPDNCPDMLFELMRMCWQYNPKMRPSFL 1260

EIISSIKEEMEPGFREV SFYYSEENKLPEPEELDLEPENMESVPLDPSASSSSLPLPDRH 1320

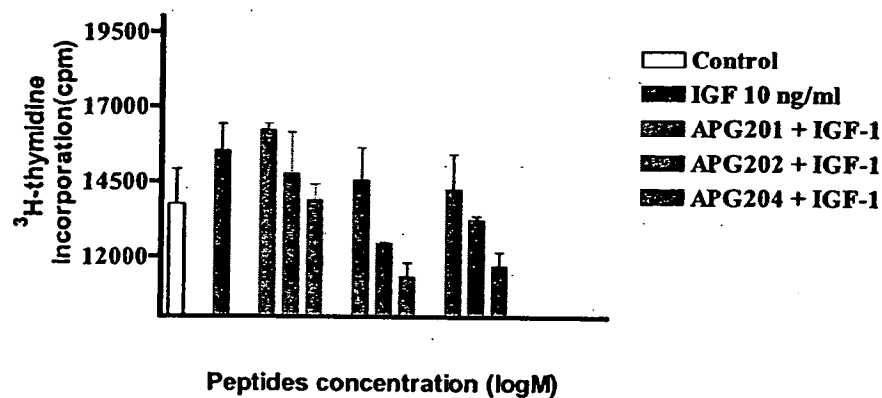
SGHKAENGPGPGVLVLRASFDERQPYAHMNGGRKNERALPLPQSSTC 1367



β Chain

FIG. 6

A



B

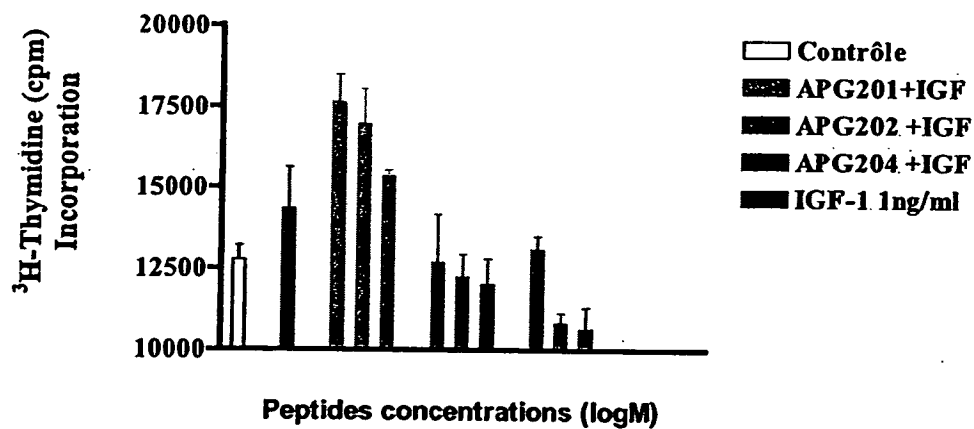
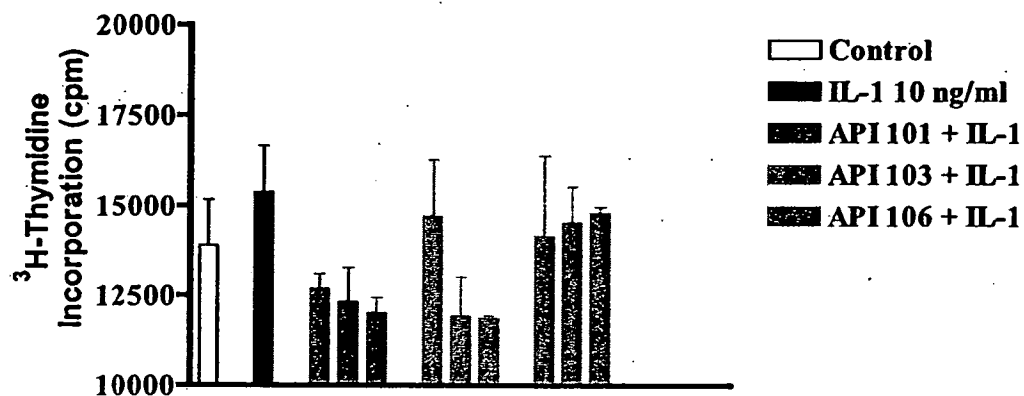
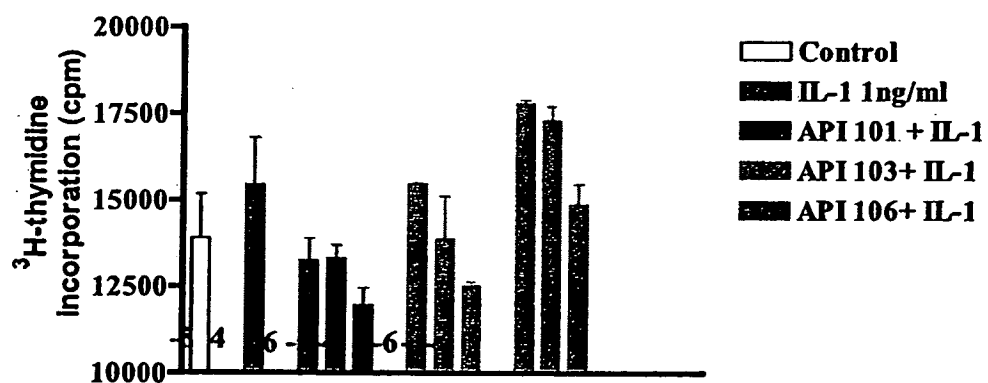


FIG. 8



Peptides concentrations (log(M))

B



Peptides concentrations (log(M))

FIG. 9

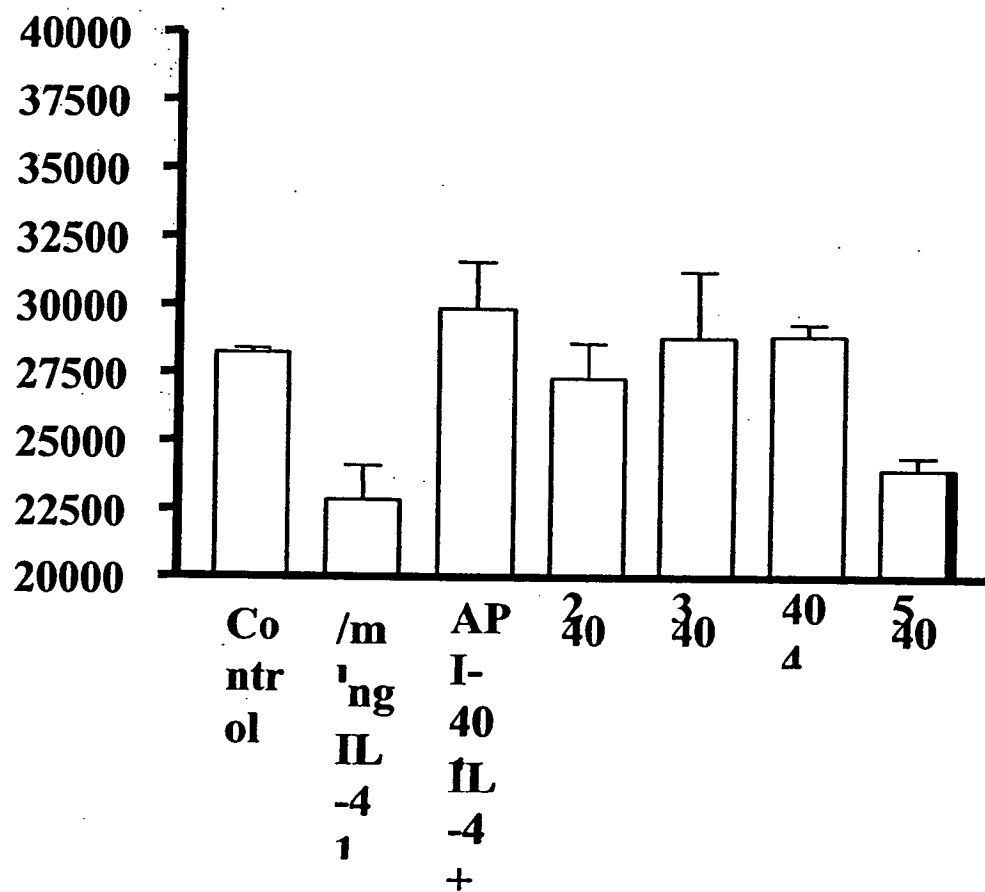


FIG. 10

VGR2_HUMAN MQSKVLLAVALWLCVETRAASVGLPSVSLDLPRLSIQKDILTILKANTTLQITCRGQRDLQ
VGR2_MOUSE MESKALLAVALWFCVETRAASVGLPGDFLHPPKLTQKDILTILANTTLQITCRGQRDLQ
VGR2_RAT MESRALLAVALWFCVETRAASVGLPGDSLHPPKLTQKDILTILANTTLQITCRGQRDLQ
VGR2_QUAIL ---MELGPLRVLTVLLCLAPVFAGLFISMDQPTLSIQKSVLTITNDTLNITCSGQRAVY
* . : : * . . : . * * * . : * * * : * * * : * * * :

VGR2_HUMAN WLWPNQSQSGSEQRVEVTECS--DGLFCKTLTIPKVIGNDTGAYKCFYRETDLASVIYVYV
VGR2_MOUSE WLWPNQARDSEERVLVTECGGDSIFCKTLTIPRVVGNDTGAYKCSYRDVDIASTVYVYV
VGR2_RAT WLWPNTPRDSEERVLVTECG--DSIFCKTLTVPRVVGNDTGAYKCFYRDTDVSSIVYVYV
VGR2_QUAIL WSWPNNQSSVEKRLAVTGCS--EGPFCKTLTLRVIGNDTGDYRCLYGDSQAATTIYVYV
* * * * . * : * * * . : . * * * * : * : * * * * : * * * : : : : * * * :

VGR2_HUMAN QDYRSPFIASVSDQHGVVYITENKNKTVVIPCGLSISNLNVSLCARYPEKRFVDPGNRIS
VGR2_MOUSE RDYRSPFIASVSDQHGVVYITENKNKTVVIPCGLSISNLNVSLCARYPEKRFVDPGNRIS
VGR2_RAT QDHRSPFIASVSDHGVVYITENKNKTVVIPCGLSISNLNVSLCARYPEKRFVDPGNRIS
VGR2_QUAIL QDYRSPFVTSVGDQLGIVYITKN--KTVVVPCLGTVSNLNVSLHAKYPEKVFVDPGKSIS
: * : * * * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : * :

VGR2_HUMAN WDSKKGFTIPSYMISYAGMVFEAKINDESYQSIMYIVVVVGYRIYDVVLSPPSHGIELSV
VGR2_MOUSE WDSEIGFTLPSYMISYAGMVFEAKINDETYQSIMYIVVVVGYRIYDVVLSPPHIEIELSA
VGR2_RAT WDSEKGFITIPSYMISYAGMVFEAKINDETYQSIMYIVLVVGYRIYDVVLSPPHIEIELSA
VGR2_QUAIL WDNKKGFTIPSHLINYAGMVFEAKIDNESYQSVIYIVAVVGYRIYDLTMNPHYQVELAV
* * : * * * : * : * * * * * : * : * * * : * * * * * : * : * : * : * :

VGR2_HUMAN GEKLVNLCTARTELVGIDFNWEYPSKHKHKKLVNRDLKTQSGSEMKKFLSTLTIDGVT
VGR2_MOUSE GEKLVNLCTARTELVGLDFTWHSPPSKSHHKKIVNRDVKPPPGTVAKMFLSTLTIESVT
VGR2_RAT GEKLVNLCTARTELVGLDFSWQFPSSKHQHKKIVNRDVKSLPGTVAKMFLSTLTIDSVT
VGR2_QUAIL GEKLVNLCTVRTELVGIDFRWDYPSIKERRATIRDLKTTAG---EIKTFVSTLTIESVN
* * * * * . * * * * * : * * . * . : : : . . . * * : * * * * : . *

VGR2_HUMAN RSDQGLYTCAASSGLMTKKNSTFVRVHEKPFVAFSGMESLVEATVGERVRIPAKYLGYP
VGR2_MOUSE KSDQGEYTCVASSGRMIKRNRTFVRVHTKPFIAFGSGMKSLVEATVGSQVRIPVKYLSYP
VGR2_RAT KSDQGEYTCAYSGMLTKKNKTFVRVHTKPFIAFGSGMKSLVEATVGSQVRIPVKYLSYP
VGR2_QUAIL LSDKGRYTCAASSGRMNMKNSSYFIHESPFHLEK-MENVVEMKLGDTVSI PVKFKGY
* * : * * * . * * * : * : : * * * : . * : * * * : * * : * * : * *

VGR2_HUMAN PPEIKWYKNGIPLESNHTIKAGHVLTIMEVSRDTGNYTVILTNPISKEKQSHVSVLVVY
VGR2_MOUSE APDIKWYRNGRPIESNYTMIVGDELTIMEVTERDAGNYTVILTNPISMEKQSHMVSLVVN
VGR2_RAT APDIKWYRNGRPIESNYTMIVGDELTIMEVSRDAGNYTVILTNPISMEKQSHMVSLVVN
VGR2_QUAIL PPEAKWYKNGKVINANHTVKLGVALVITEATEKDAGNYTVVLTNPNTNKMQRHTFTLLVN
. * : * * * : * : * * : * * * : * : * * * * : * * : * * : * :

VGR2_HUMAN VPPQIGEKSLISPVDSYQYGTQTTLCTVYAI PPPHHIHWYQLEEECANEPSQAVSVTN
VGR2_MOUSE VPPQIGEKALISPMDSYQYGTMTLTCTVYANPPLHHIQWYQLEEEACSYRPG---QTS
VGR2_RAT VPPQIGEKALISPMDSYQYGTMTLTCTVYANPPLHHIQWYQLEEEACSYRPS---QTN
VGR2_QUAIL VPPQIGENALMAPVDSYKYGSTQALTCTIYAVPPPAVLWYQLEEECTFSPQKVRILGAN
* * * * * : * : * * * : * : * * * : * * * : * * * * : * * : * :

VGR2_HUMAN PYPCEEWSVEDFQGGNKIEVNKNQFALIEGKNKTVSTLVIQAANVSALYKCEAVNKVGR
VGR2_MOUSE PYACKEWHRVEDFQGGNKIEVTKNQYALIEGKNKTVSTLVIQAANVSALYKCEAINKAGR
VGR2_RAT PYTCKEWRHVKDFQGGNKIEVTKNQYALIEGKNKTVSTLVIQAAYVSALYKCEAINKAGR
VGR2_QUAIL PYACRKWKVISERKGGNQVEIKQR-VVTIAGKTKTVSTLVIQAANVSALYRCMATNRAGS
* * : * * : * : * * * : * : * * * * : * * * * * : * * * * : * * : *

VGR2_HUMAN GERVISFHVTRGPEITLQPDMPTEQESVSLWCTADRSTFENLTWYKLGPPPLPIHVGEL
VGR2_MOUSE GERVISFHVIRGPEITVQPAAPTEQESVSLCTADRNTFENLTWYKLGSAQTSVHMGES
VGR2_RAT GERVISFHVIRGPEITVQPATQPTERESMSLLCTADRNTFENLTWYKLGSAQTSVHMGES
VGR2_QUAIL SERVISFHVTRGLEINLQPRSQLTEKDNTSLQCTADKFTFEKLSWYKLSTHVSQTFFGGL
. * * * * * * * * : * * * * : * * * * : * * * * : * * * * : * *

VGR2_HUMAN PTPVCKNLDLWKLNATMFSN-STNDILIMELKNASLQDQGDYVCLAQDRKTKKRHCVRV
VGR2_MOUSE LTPVCKNLDALWKLNGTMFSN-STNDILIVAFQNASLQDQGDYVCSAQDKTKKRHCCLVK
VGR2_RAT LTPVCKNLDALWKLNGTVFSN-STNDILIVAFQNASLQDQGDYVCSAQDKTKKRHCCLVK
VGR2_QUAIL PMPVCKNLDALQKLNATVSNVNGENVTLLEILRNISLQDGGDYVCIAQDKKAKTQHCLVK
* * * * * : * * * * : . . . * * : : * * * * : * * * * : * * * : * * :

Figure 13

VGR2_HUMAN	QLTVLERVAPTITGNLENQTTTIGESIEVSVCTASGNPPQIMWFKDNETLVEDSGIVLKD
VGR2_MOUSE	QLIILERMAMITGNLENQTTTIGETIEVTCPASGNPTPHITWFKDNETLVEDSGIVLKD
VGR2_RAT	QLVILERMAMITGNLENQTTTIGETIEVVCPTSGNPTPLITWFKDNETLVEDSGIVLKD
VGR2_QUAIL	HLTVQEPHLHRLVGNLENQTTNIGETIEVLCTVNGVPPPNITWFKNSETLFEDSGIVLKD
	: * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	GNRNLTIRRVKEDGGLYTCQACSVLGCACVEAFFIIEGAQEKTNLEIILVGTAVIAMF
VGR2_MOUSE	GNRNLTIRRVKEDGGLYTCQACNVLGCARAETLFIIEGAQEKTNLEVIILVGTAVIAMF
VGR2_RAT	GNRNLTIRRVKEDGGLYTCQACNVLGCARAETLFIIEGVQEKTNLEVIILVGTAVIAMF
VGR2_QUAIL	GNKTLTIRRVKEDGGLYTCACNIGLCKKAEAFSVQGAEEKTNLEIILVGTAVIAMF
	* : * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	FWLLLVILRTVTKRANGGELKTGYLSIVMDPDELPLDEHCERLPYDASKWEFPRDLKLG
VGR2_MOUSE	FWLLLVILRTVTKRANGELKTGYLSIVMDPDELPLDERCERLPYDASKWEFPRDLKLG
VGR2_RAT	FWLLLVILRTVTKRANGELKTGYLSIVMDPDELPLDERCERLPYDASKWEFPRDLKLG
VGR2_QUAIL	FWLLLVILRTVTKRANGDMKTGYLSIIMDPDEVPIDEHCERLPYDASKWEFPRDLKLG
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	KPLGRGAFGQVIEADAFGIDKTATCRTVAVKMLKEGATHSEHRALMSELKILIHIGHHLN
VGR2_MOUSE	KPLGRGAFGQVIEADAFGIDKTATCTVAVKMLKEGATHSEHRALMSELKILIHIGHHLN
VGR2_RAT	KPLGRGAFGQVIEADAFGIDKTATCTVAVKMLKEGATHSEHRALMSELKILIHIGHHLN
VGR2_QUAIL	KPLGRGAFGQVIEADAFGIDKTATCRTVAVKMLKEGATHSEHRALMSELKILIHIGHHLN
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	VVNLLGACTKPGGPLMVIVEFCKFGNLSTYLRSKRNEFVVPYKTKGARFRQGD-YVGAIP
VGR2_MOUSE	VVNLLGACTKPGGPLMVIVEFSKFGNLSTYLRGKRNEFVVPYKSKGARFRQGD-YVGELS
VGR2_RAT	VVNLLGACTKPGGPLMVIVEFCKFGNLSTYLRGKRNEFVVPYKSKGARFRSGKD-YVGELS
VGR2_QUAIL	VVNLLGACTKPGGPLMVIVEYCKFGNLSAYLRSKRSEFIPYKMSARFRQKENYTGDIS
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	VDLKRRLDSITSSQSSASSGFVEEKSLSDVVEEEAP-EDLYKDFTLLEHLICYSFQVAKG
VGR2_MOUSE	VDLKRRLDSITSSQSSASSGFVEEKSLSDVVEEEAS-EELYKDFTLLEHLICYSFQVAKG
VGR2_RAT	VDLKRRLDSITSSQSSASSGFVEEKSLSDVVEEEAS-EELYKDFTLLEHLICYSFQVAKG
VGR2_QUAIL	TDLKQRLDSITSSQSSSTSSGFVEERSLSDVVEEDAGSEDLCKNPLTMEDLICYSFQVARG
	* : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	MEFLASRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMape
VGR2_MOUSE	MEFLASRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMape
VGR2_RAT	MEFLASRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMape
VGR2_QUAIL	MEFLASRKCIHRDLAARNILLSDNNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMape
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	TIFDRVYTIQSDVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTPEM
VGR2_MOUSE	TIFDRVYTIQSDVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTPEM
VGR2_RAT	TIFDRVYTIQSGVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTPEM
VGR2_QUAIL	TIFDRVYTIQSDVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTPEM
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	YQTMLCDWHGEPFSQRPTFSELVEHLGNLLQANAQQDGKDYLVLPISETLSMEEDSGLSLP
VGR2_MOUSE	YQTMLCDWHEDPNQRPSFSELVEHLGNLLQANAQQDGKDYLVLPMSETLSMEEDSGLSLP
VGR2_RAT	YQTMLCDWHEDPNQRPAFSELVEHLGNLLQANAQQDGKDYLVLPMSETLSMEEDSGLSLP
VGR2_QUAIL	YQTMLCDWHGDPKQRPTFSELVEHLGNLLQANVRQDGKDYLVLPLSVSLNMEEDSGLSLP
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	TSPVSCMEEEVCDPKFHYDNTAGISQYLQNSKRKSRPVSVKTFEDIPLLEEPEVKVIPDD
VGR2_MOUSE	TSPVSCMEEEVCDPKFHYDNTAGISHYLQNSKRKSRPVSVKTFEDIPLLEEPEVKVIPDD
VGR2_RAT	TSPVSCMEEEVCDPKFHYDNTAGISHYLQNSKRKSRPVSVKTFEDIPLLEEPEVKVIPDD
VGR2_QUAIL	TSPASCKEEVCDPKFHYDNTAGISQYRQSGKRKSRPVSVKTFEDIPLVTT-VKVQEE
	*** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *
VGR2_HUMAN	NQTDSCGMVLASEELKTLEDRTK-LSPSFGGMVPSKSRESVASEGSNQTSGYQSGYHSDDT
VGR2_MOUSE	SQTDSCGMVLASEELKTLEDNRN-LSPSFGGMMPKSRESVASEGSNQTSGYQSGYHSDDT
VGR2_RAT	SQTDSCGMVLASEELKTLEDNRN-LSPSFGGMMPKSRESVASEGSNQTSGYQSGYHSDDT
VGR2_QUAIL	NQTDSCGMVLASEELKTLEEQDKQVKIPFSTLAPSKSNESVMSEASNQTSGYQSGYHSDDM
	***** : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *

Figure 13 (continued)

VGR2_HUMAN	DTTVYSSEEAEELLKLI EIGVQTGSTAQILQPD SGTTLSSPPV-----
VGR2_MOUSE	DTTVYSSDEAGLLKMVDAAVHADSGTTLQLT SCLNGSGVPVAPPPPTPGNHERGAA
VGR2_RAT	DTTVYSSDEAGLLKLVDVAGHVDSGTTLRSSPV-----
VGR2_QUAIL	DNMVCSSDETELLCAQEASPTLPRCAWPGIYSPAPVASLPL-----
	*. * **::: ** : . :

Figure 13 (continued)